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ALLEN, DYER, DOPPELT, MILBRATH & GILCHRIST P.A. 1401 CITRUS CENTER 255 SOUTH ORANGE AVENUE P.O. BOX 3791 ORLANDO, FL 32802-3791				PARRY, CHRISTOPHER L
ART UNIT		PAPER NUMBER		
2421				
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

creganoa@addmg.com

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/716,987	FRISCO ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	CHRIS PARRY	2421	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 17 November 2008.

2a) This action is **FINAL**.                    2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1,2,5-23 and 26-31 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5) Claim(s) \_\_\_\_\_ is/are allowed.

6) Claim(s) 1,2,5-23 and 26-31 is/are rejected.

7) Claim(s) \_\_\_\_\_ is/are objected to.

8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All    b) Some \* c) None of:

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) Notice of References Cited (PTO-892)

2) Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.

4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.

5) Notice of Informal Patent Application

6) Other: \_\_\_\_\_.

## DETAILED ACTION

### ***Response to Arguments***

1. Applicant's arguments filed 17 November 2008 have been fully considered but they are not persuasive.

In response to applicant's traversal (see page 10 of remarks) of the rejection of claims 8 and 9 under 35 U.S.C. 112, the examiner points out applicant's specification fails to adequately disclose that the processor can determine an undesired condition for each channel or a plurality of channels, independent of a strength of a signal received.

Claim 1 currently claims the processor determines component malfunction conditions, where the component malfunction is independent of signal strength.

Claim 8 currently recites that said processor determines the undesired condition for each of the individual channels. As previously cited by the examiner, page 27, line 16 to page 28, line 9 of applicant's specification cites:

*The system 30 as shown in FIG. 12 of the present invention includes a processor 175 which may detect the undesired condition in the form of a weak or absent received signal strength, and cause the passenger video display 68 to display a substitute image. More particularly, the processor 175 may be part of the AVM 50 as described above, could be part of another device, such as the MRM 40, or could be a separate device.*

*The processor 175 illustratively includes a circuit or portion 176 for determining a weak received signal strength as will be appreciated by those skilled in the art. Suitable circuit constructions for the weak received signal strength determining portion or circuit 176 will be readily appreciated by those skilled in the art, and require no further discussion herein. The threshold for the weak received signal strength determining portion or circuit 176 can preferably be set so as to trigger the substitute image before substantial degradation occurs, or before a text default message would otherwise be triggered, depending on the satellite service provider, as would be appreciated by*

*those skilled in the art. In addition, the substitute image could be triggered for a single programming channel upon a weakness or loss of only that single programming channel, or may be generated across the board for all programming channels as will be readily appreciated by those skilled in the art.*

Thus, applicant's specification fails to provide support for the processor to determine an undesired condition for each channel or a plurality of channels, where the undesired condition is **independent** of the received signal strength.

In response to applicant's argument (pages 13 to 14) stating Galipeau fails to disclose a processor connected to a TV receiver for determining a component malfunction, the examiner respectfully disagrees.

To address applicant's first concern that video modules 152 are not TV receivers, the examiner notes that video modules 152 can transmit and receive user's request for video on demand. Further, the aircraft comprises a video reproducer unit 194 used to transmit video on high speed communication lines 20, which connects to each integrated seat box 18 comprising video module 152 that output video to video display 154 (Col. 9, lines 26-31, Col. 10, lines 59-67 and Col. 4, lines 13-31). Thus video modules 152 receive requested video from a source and then output the received video to connected monitors such as claimed TV receiver.

To address applicant's concerns further, although video module 152 transmits its current status to the head end, workstation 200 which is connected to video module 152 via cable 20 can identify any faults during situations in which video module 152 is not capable of reporting its status to the head end.

Additionally, Sklar a processor (44 – figure 2) connected to said satellite TV receiver for determining an undesired condition (i.e., determine that the aircraft is about to leave the coverage area) (Col. 9, line 61 to Col. 10, line 8) and for generating responsive thereto a substitute image on said at least one passenger video display rather than permit display of an undesired image which would otherwise be produced (i.e., region control unit 44 instructs receiver unit 42 to switch to a different program) (Col. 10, lines 32-47 and Col. 11, lines 9-33). Although Sklar failed to disclose processor 44 is not capable of detecting component malfunctions and TV receivers do not report status back to processor 44, it does not preclude the processor of Sklar from being modified to include the capability to advantageously detect component malfunction conditions.

Galipeau discloses an in-flight workstation 200 or “processor” connected to video modules 152 or “TV receiver” for identifying faulty components of the system for repair and replacement or “determining a component malfunction condition” (Col. 11, lines 35-47). Thus it would be advantageous to add the functionality of identifying faulty components as taught by Galipeau to Sklar for the benefit of identifying defective system components and providing information to the in-flight crew to facilitate identifying the defective components that require repair or replacement.

2. Applicant's failure to adequately traverse the Examiner's taking of Official Notice in the last Office Action is taken as an admission of the fact(s) noticed.

***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 8 and 9 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

As for **Claim 8**, the written specification fails to provide support for “*a processor connected to said satellite TV receiver for determining a component malfunction condition, the component malfunction being independent of a strength of a signal received at said satellite TV receiver*” as recited on lines 10-12 of claim 1 in addition to “*wherein said processor determines the undesired condition for each of the individual video channels*” as recited on lines 3-5 of claim 8.

Specifically, the specification cites the processor 175 includes a portion 176 for determining a weak received signal strength. Further, when the strength of the signal reaches a threshold, a substitute image is generated and provided for a single channel (page 27, line 16 to page 28, line 9).

Thus the specification does not provide support for wherein the processor determines the undesired condition for each of the individual video channels without

taking into consideration the received signal strength value to determine the existence of an undesired condition for each individual video channel.

As for **Claim 9**, the written specification fails to provide support for “*a processor connected to said satellite TV receiver for determining a component malfunction condition, the component malfunction being independent of a strength of a signal received at said satellite TV receiver*” as recited on lines 10-12 of claim 1 in addition to “*wherein said processor determines the undesired condition for the plurality of video channels*” as recited on lines 3-5 of claim 9.

Specifically, the specification cites the processor 175 includes a portion 176 for determining a weak received signal strength. Further, when the strength of the signal reaches a threshold, a substitute image is generated and provided for all programming channels across the board (page 27, line 16 to page 28, line 9).

Thus the specification does not provide support for wherein the processor determines the undesired condition for each of the video channels without taking into consideration the received signal strength value to determine the existence of an undesired condition for the plurality of video channels.

### ***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 1, 2, 6, and 8-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sklar et al. "Sklar" (USPN 5,990,928) [of record] in view of Galipeau et al. "Galipeau" (USPN 6,249,913) [of record].

Regarding Claim 1, Sklar discloses an aircraft in-flight entertainment system (50 – figure 1) (Col. 7, lines 57-61) comprising:

a satellite television (TV) receiver (42 – figure 2) (Col. 8, lines 62-67);

at least one passenger video display (56 – figure 1) connected to said satellite TV receiver (Col. 9, lines 26-35); and

a processor (44 – figure 2) connected to said satellite TV receiver for determining an undesired condition (i.e., determine that the aircraft is about to leave the coverage area) (Col. 9, line 61 to Col. 10, line 8) and for generating responsive thereto a substitute image on said at least one passenger video display rather than permit display of an undesired image which would otherwise be produced (i.e., region control unit 44 instructs receiver unit 42 to switch to a different program) (Col. 10, lines 32-47 and Col. 11, lines 9-33).

Sklar discloses region control unit 44 or "processor" is configured to monitor coverage area and signal strength of the direct broadcast satellite system, wherein the undesired condition is the aircraft leaves a coverage area of a satellite before a particular program can finish. However, Sklar is silent on disclosing a processor connected to said satellite TV receiver for determining a component malfunction condition, the component malfunction being independent of a strength of a signal received at said satellite TV receiver.

In an analogous art, Galipeau discloses an aircraft in-flight entertainment system (178 – figure 9; Col. 10, lines 17-29) comprising:

a television (TV) receiver (video module 152 – figure 6b which is part of integrated seat box 18) and at least one passenger video display (154 – figure 6b) connected to said TV receiver (Col. 6, lines 19-21 & Col. 9, lines 16-41); and  
a processor (200 – figure 9a) connected to said TV receiver (via seat-to-seat cable 20) for determining a component malfunction condition (i.e., identify faulty components of the system for repair or replacement), the component malfunction being independent of a strength of a signal received at said TV receiver (i.e., workstation identifies faulty components and defective modules independent of signal strength) (Col. 11, lines 35-47; Col. 6, lines 57-62; and Col. 9, lines 47-67).

Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Sklar to include a processor connected to said satellite TV receiver for determining a component malfunction condition, the component malfunction being independent of a strength of a signal received at said satellite TV receiver as taught by Galipeau for the benefit of combining prior art elements according to known methods to yield predictable results of identifying defective modules and providing information to the in-flight crew to facilitate identifying the defective components that require repair or replacement.

As for Claim 2, Sklar and Galipeau disclose, in particular Sklar teaches wherein said satellite TV receiver comprises a direct broadcast satellite (DBS) receiver (Col. 5, lines 41-65).

As for Claim 6, Sklar and Galipeau disclose, in particular Sklar teaches region control unit 44 or “processor” is configured to monitor coverage area and signal strength of the direct broadcast satellite system, wherein the undesired condition is the aircraft leaves a coverage area of a satellite before a particular program can finish. However, the combination of Sklar and Galipeau are silent on disclosing wherein the undesired image is default text message image. The examiner gives Official Notice that it is notoriously well known in the art to monitor the broadcast for text, images, graphics, and any other images within a program and replacing the detected image with a more customized image for the user.

Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Sklar and Galipeau to include wherein the undesired image is default text message image for the benefit of detecting a non-customized image and replacing the image with a more user-friendly image for the user.

As for Claim 8, Sklar and Galipeau disclose, in particular Sklar teaches wherein said satellite TV receiver generates a plurality of individual video channels (Col. 8, line 62 to Col. 9, line 29); and wherein said processor determines the undesired condition

for each of the individual video channels (Col. 9, line 61 to Col. 10, line 8 and Col. 10, lines 32-41).

As for Claim 9, Sklar and Galipeau disclose, in particular Sklar teaches wherein said satellite TV receiver generates a plurality of video channels (Col. 8, line 62 to Col. 9, line 29); and wherein said processor determines the undesired condition for the plurality of video channels (Col. 9, line 61 to Col. 10, line 8 and Col. 10, lines 32-41).

As for Claim 10, Sklar and Galipeau disclose, in particular Sklar teaches wherein said at least one passenger video display comprises a plurality of passenger seatback video displays (56 – figure 1) (Col. 7, lines 57-61).

As for Claim 11, Sklar and Galipeau disclose, in particular Galipeau discloses an aircraft in-flight entertainment system (figure 9) according to Claim 1 wherein said at least one passenger video display (154 – figure 6B) comprises a plurality of passenger video displays (154 – figure 6B & figure 9B) (Col. 10, lines 19-22), and further comprising:

a plurality of signal distribution devices (18 – figures 1, 3, & 9b) (Col. 4, lines 1-15); and

a cable network (20 – figures 1, 3, and 9) connecting said satellite TV receiver (152 – figure 6B) (Col. 9, lines 16-41) to said signal distribution devices (figure 9B) (Col.

4, lines 13-20 and Col. 5, lines 26-31), and connecting said signal distribution devices to said passenger video displays (154 – figure 6B & figure 9b) (Col. 4, lines 1-20).

As for Claim 12, Sklar and Galipeau disclose, in particular Galipeau teaches wherein the aircraft is a narrow-body aircraft having a single passenger aisle (Col. 3, lines 54-65).

7. Claims 13-23 and 26-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sklar in view of Galipeau and further in view of Gangitano (USPN 6,580,452 B1) [of record].

Regarding Claim 13, Sklar discloses an aircraft in-flight entertainment system (50 – figure 1) (Col. 7, lines 57-61) comprising:

a satellite television (TV) receiver (42 – figure 2) (Col. 8, lines 62-67);  
a plurality of passenger video displays (56 – figure 1) connected to said satellite TV receiver (Col. 9, lines 26-35); and  
a processor (44 – figure 2) connected to said satellite TV receiver for determining a signal strength condition (i.e., determine that the aircraft is about to leave the coverage area) (Col. 9, line 61 to Col. 10, line 8) and for generating responsive thereto a substitute image on said passenger video displays prior to display of an undesired image which would otherwise be produced (i.e., region control unit 44 instructs receiver unit 42 to switch to a different program) (Col. 10, lines 32-47 and Col. 11, lines 9-33).

However, Sklar is silent on disclosing a processor connected to said satellite TV receiver for determining a component malfunction condition, the component malfunction being independent of a strength of a signal received at said satellite TV receiver.

In an analogous art, Galipeau discloses an aircraft in-flight entertainment system (178 – figure 9; Col. 10, lines 17-29) comprising:

a television (TV) receiver (i.e., video module 152 as shown in figure 6b which is part of integrated seat box 18) and a plurality of passenger video displays (154 – figure 6b) connected to said TV receiver (Col. 6, lines 19-21 & Col. 9, lines 16-41); and

a processor (200 – figure 9a) connected to said TV receiver (via seat-to-seat cable 20) for determining a component malfunction condition (i.e., identify faulty components of the system for repair or replacement), the component malfunction being independent of a strength of a signal received at said TV receiver (i.e., workstation identifies faulty components and defective modules independent of signal strength) (Col. 11, lines 35-47; Col. 6, lines 57-62; and Col. 9, lines 47-67).

Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Sklar to include a processor connected to said satellite TV receiver for determining a component malfunction condition, the component malfunction being independent of a strength of a signal received at said satellite TV receiver as taught by Galipeau for the benefit of combining prior art elements according to known methods to yield predictable results of identifying defective modules and providing information to the in-flight crew to facilitate identifying the defective components that require repair or replacement.

The combination of Sklar and Galipeau are silent on disclosing a processor connected to said satellite TV receiver for determining a weak received signal strength condition.

In an analogous art, Gangitano discloses an apparatus for displaying a received signal strength comprising, a processor (22 – figure 4) connected to said satellite TV receiver (14 – figure 4) for determining a weak received signal strength condition (Col. 3, lines 9-19 & lines 53-62) and for generating responsive thereto a substitute image...(figures 6a-6c) (Col. 3, lines 20-30; Col. 4, lines 7-17; Col. 4, line 45 to Col. 5, line 5). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Sklar and Gangitano to include wherein the processor determines the weak received signal strength condition as taught by Gangitano for the benefit of combining prior art elements according to known methods to yield predictable results of providing a user-friendly notification to a user when the video image suddenly freezes or the image becomes blurred.

As for Claim 14, Sklar, Galipeau, and Gangitano disclose, in particular Sklar teaches wherein said satellite TV receiver comprises a direct broadcast satellite (DBS) receiver (Col. 5, lines 41-65).

As for Claim 15, Sklar and Gangitano disclose, in particular Gangitano teaches wherein the undesired image is a degraded program image (Col. 3, lines 20-62 & Col. 4, lines 7-36).

As for Claim 16, Sklar, Galipeau, and Gangitano fail to specifically disclose wherein the undesired image is default text image. The examiner gives Official Notice that it is notoriously well known in the art to monitor the broadcast for text, images, graphics, and any other images within a program and replacing the detected image with a more customized image for the user.

Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Sklar, Galipeau, and Gangitano to include wherein the undesired image is default text message image for the benefit of detecting a non-customized image and replacing the image with a more user-friendly image for the user.

As for Claim 17, Sklar and Gangitano disclose, in particular Gangitano teaches a storage device (32 – figure 5) connected to said processor for storing the substitute image (figures 6a-6c) (Col. 5, lines 9-25).

As for Claim 18, Sklar, Galipeau, and Gangitano disclose, in particular Sklar teaches wherein said satellite TV receiver generates a plurality of individual video channels (Col. 8, line 62 to Col. 9, line 29); and wherein said processor determines the undesired condition for each of the individual video channels (Col. 9, line 61 to Col. 10, line 8 and Col. 10, lines 32-41).

As for Claim 19, Sklar, Galipeau, and Gangitano disclose, in particular Sklar teaches wherein said satellite TV receiver generates a plurality of video channels (Col. 8, line 62 to Col. 9, line 29); and wherein said processor determines the undesired condition for the plurality of video channels (Col. 9, line 61 to Col. 10, line 8 and Col. 10, lines 32-41).

As for Claim 20, Sklar, Galipeau, and Gangitano disclose, in particular Galipeau teaches a plurality of signal distribution devices (18 – figures 1, 3, & 9b; Col. 4, lines 1-15); and a cable network (20 – figures 1, 3, and 9) connecting said satellite TV receiver (152 – figure 6b) (Col. 9, lines 16-41) to said signal distribution devices (figure 9B) (Col. 4, lines 13-20 and Col. 5, lines 26-31), and connecting said signal distribution devices to said passenger video displays (154 – figure 6B & figure 9b) (Col. 4, lines 1-20).

As for Claim 21, Sklar, Galipeau, and Gangitano disclose, in particular Galipeau teaches wherein the aircraft is a narrow-body aircraft having a single passenger aisle (Col. 3, lines 54-65).

Regarding Claim 22, Sklar discloses a method for operating an aircraft in-flight entertainment system (50 – figure 1) (Col. 7, lines 57-61) comprising a satellite television (TV) receiver (42 – figure 2) (Col. 8, lines 62-67), and at least one passenger video display (56 – figure 1) connected to said satellite TV receiver (Col. 9, lines 26-35); the method comprising:

operating a processor (44 – figure 2) connected to the satellite TV receiver for determining a signal strength condition (i.e., determine that the aircraft is about to leave the coverage area) (Col. 9, line 61 to Col. 10, line 8); and

generating a substitute image on the at least one passenger video display rather than permit display of an undesired image which would otherwise be produced (i.e., region control unit 44 instructs receiver unit 42 to switch to a different program) (Col. 10, lines 32-47 and Col. 11, lines 9-33).

However, Sklar is silent on disclosing operating a processor connected to said satellite TV receiver for determining a component malfunction condition, the component malfunction being independent of a strength of a signal received at said satellite TV receiver.

In an analogous art, Galipeau discloses a method for operating an aircraft in-flight entertainment system (178 – figure 9; Col. 10, lines 17-29) comprising:

operating a processor (200 – figure 9a) connected to the TV receiver (via seat-to-seat cable 20) for determining a component malfunction condition (i.e., identify faulty components of the system for repair or replacement), the component malfunction being independent of a strength of a signal received at said TV receiver (i.e., workstation identifies faulty components and defective modules independent of signal strength) (Col. 11, lines 35-47; Col. 6, lines 57-62; and Col. 9, lines 47-67).

Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method of Sklar to include operating a processor connected to said satellite TV receiver for determining a component

malfunction condition, the component malfunction being independent of a strength of a signal received at said satellite TV receiver as taught by Galipeau for the benefit of combining prior art elements according to known methods to yield predictable results of identifying defective modules and providing information to the in-flight crew to facilitate identifying the defective components that require repair or replacement.

However, Sklar and Galipeau are silent on operating a processor connected to the satellite TV receiver for determining a weak received signal strength condition.

In an analogous art, Gangitano discloses a method for displaying a received signal strength comprising, determining a weak received signal strength condition (Col. 3, lines 9-19 & lines 53-62) and generating a substitute image (figures 6a-6c) (Col. 3, lines 20-30; Col. 4, lines 7-17; Col. 4, line 45 to Col. 5, line 5). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method of Sklar and Galipeau to include wherein the processor determines the weak received signal strength condition as taught by Gangitano for the benefit of combining prior art elements according to known methods to yield predictable results of providing a user-friendly notification to a user when the video image suddenly freezes or the image becomes blurred.

Considering Claim 23, the claimed elements of wherein the satellite TV receiver comprises a direct broadcast satellite (DBS) receiver, corresponds with subject matter mentioned above in the rejection of claim 14, and is likewise treated.

Considering Claim 26, the claimed elements of wherein the undesired image is a degraded program image, corresponds with subject matter mentioned above in the rejection of claim 15, and is likewise treated.

Considering Claim 27, the claimed elements of wherein the undesired image is default text message image, corresponds with subject matter mentioned above in the rejection of claim 16, and is likewise treated.

Considering Claim 28, the claimed elements of storing the substitute image, corresponds with subject matter mentioned above in the rejection of claim 17, and is likewise treated.

Considering Claim 29, the claimed elements of wherein the satellite TV receiver generates a plurality of individual video channels, corresponds with subject matter mentioned above in the rejection of claim 18, and is likewise treated.

Considering Claim 30, the claimed elements of wherein the satellite TV receiver generates a plurality of video channels, corresponds with subject matter mentioned above in the rejection of claim 19, and is likewise treated.

As for Claim 31, Sklar, Galipeau, and Gangitano disclose, in particular Galipeau teaches wherein the aircraft is a narrow-body aircraft having a single passenger aisle (Col. 3, lines 54-65).

8. Claims 5 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sklar in view of Galipeau as applied to claim 1 above, and further in view of Gangitano.

As for Claim 5, Sklar and Galipeau disclose, in particular Sklar discloses region control unit 44 or “processor” is configured to monitor coverage area and signal strength of the direct broadcast satellite system, wherein the undesired condition is the aircraft leaves a coverage area of a satellite before a particular program can finish. However, Sklar and Galipeau are silent on disclosing wherein the undesired image is a degraded program image.

In an analogous art, Gangitano discloses an apparatus for displaying a received signal strength comprising, a processor (22 – figure 4) connected to said satellite TV receiver (14 – figure 4) for determining an undesired condition (Col. 3, lines 9-19), wherein the undesired image is a degraded program image (Col.3, lines 20-62 & Col. 4, lines 7-36). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Sklar and Galipeau to include wherein the processor determines the undesired image is a degraded program image as taught by Gangitano for the benefit of providing a more user-friendly notification of an indication of why a video image has suddenly froze on the screen of their display.

As for Claim 7, Sklar and Galipeau disclose, in particular Sklar teaches displaying a substitute image (Col. 11, lines 25-33), however Sklar and Galipeau are silent on disclosing a storage device connected to said processor for storing the substitute image.

In an analogous art, Gangitano discloses an apparatus for displaying a received signal strength comprising, a storage device (32 – figure 7) connected to said processor (36 – figure 7) for storing the substitute image (figures 6a-6c) (Col. 5, lines 9-25). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Sklar and Galipeau to include a storage device for storing the substitute image as taught by Gangitano for the benefit of storing and retrieving a user-friendly image that can be quickly displayed to the user when a frozen image has been detected.

### ***Conclusion***

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHRIS PARRY whose telephone number is (571) 272-8328. The examiner can normally be reached on Monday through Friday, 8:00 AM EST to 4:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, JOHN MILLER can be reached on (571) 272-7353. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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